

In the embodiment of the invention as set forth in Claim 19, the active material of the negative electrode is one of the three different sulfides having formulas (1), (2) or (3), wherein the metal elements of these formulas are as defined in the claim, and element M is also defined in the claims.


In the Advisory Action dated March 21, 2001, the Examiner has noted that the issue raised under 35 U.S.C. §112 with respect to Claims 2-5, 19 and 21 and the §103 rejection of Claim 19 over Kondo have been overcome.

The Examiner maintains the rejection of the claims based on the Kawakami et al disclosure on the basis that one of skill in the art would find it obvious to employ any one of the materials disclosed in column 7, lines 44-60 as useful for the construction of the positive electrode of a secondary battery, as the material for the construction of a negative electrode of a battery. In other words one of skill in the art would find it obvious to use any one of the positive electrode materials disclosed in Kawakami et al as a material for an negative electrode. Given the position as stated by the Examiner, applicants have conducted an experiment, described in the attached Declaration under 37 C.F.R. §1.132, in which one of the positive electrode materials disclosed in the patent, i.e. manganese sulfide, which in fact is preferred as a positive electrode material (lines 57-60), was used as the negative electrode material of a secondary battery. The Declaration states that when the battery was subjected to the same charge/discharge test of Example 1, the cell or battery did not work. Thus, not all of the sulfide materials disclosed in the patent function as a negative electrode material of a battery. The Examiner's position therefore as stated on the record is unfounded and withdrawal of the rejection of the claims based on the Kawakami et al patent is respectfully requested.

" It is now believed that the application is in proper condition for consideration on its merits.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,  
MAIER & NEUSTADT, P.C.



---

Norman F. Oblon  
Attorney of Record  
Registration No.: 24,618

Frederick D. Vastine, Ph.D.  
Registration No.: 27,013



**22850**

TEL: 703-413-3000  
FAX: 703-413-2220



#18  
8-17-01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Takako KAMO

Serial No. 09/160,583

Group Art Unit: 1745

Filed: September 25, 1998

Examiner: Jonathan S. Crepeau

For: NONAQUEOUS SECONDARY BATTERY

DECLARATION UNDER 37 CFR 1.132

Honorable Commissioner of Patents and Trademarks,  
Washington, D.C. 20231

RECEIVED  
AUG 17 2001  
TC 1700

Sir:

I, Takako KAMO, a Japanese citizen, working at 8-3-1, Chuo, Amimachi, Inashiki-gun, Ibaraki 300-0332 Japan, hereby declare and state that I received a Master's Degree of Applied Chemistry from the faculty of Engineering in Tohoku University, in March of 1987, and I was employed by Mitsubishi Chemical Corporation in May of 1988. I have been principally engaged in research and development of solid catalysts from that time to 1995 and in research and development of materials for battery since 1996.

I declare further that I am the inventor of the subject matter of the claims in the above-identified application and I have read all of the documents contained in the file wrapper of the above-entitled application.

I declare further that the test described below was conducted at my direction and under my supervision and the test results are true and correct to the best of my knowledge.

For the purpose of comparison, a coin-shaped cell was produced in the same manner as in Example 2 by use of MnS as an active material of a negative electrode. The cell did not work in the same charge/discharge test as in Example 1.

Thus, all the sulfide materials of Kawakami et al. do not function as a negative electrode and the materials used for positive and negative electrode in the patent are not always interchangeable.

I believe that no one skilled in the art reviewing Kawakami et al. would not be led to use the specific negative electrode active materials of the present invention in the construction of a secondary battery which exhibits a high voltage, high energy density and excellent charging and discharging characteristics, as well as long cycle life and high reliability.

I declare further that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application of any patent issuing thereon.

Dated this 25<sup>th</sup> day of May, 2001.

Takako Kamo

Takako KAMO